

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A video game apparatus for generating, and supplying to a display, an image signal for displaying a player object and a land object existing at the foot of the player object ~~existing in the vicinity of a land object~~ in a virtual three dimensional space by processing image data for the player object and the land object according to a program, said video game apparatus comprising:

a player object image data generator that generates player object image data to display a player object;

a land object image data generator that generates land object image data to display a land object; wherein

said land object image data includes a program control code;

a program control code detector that detects a program control code included in the land object image data for displaying the land object in the vicinity of said player, and that detects when a predetermined relationship exists between the position of the player object and the land object, and

image changing circuitry to cause the image signal to change depending upon the program control code detected when said predetermined relationship is detected between the position of the player object and the land object, wherein the program control code is not visible to a user of said video game apparatus.

and further wherein an object exists at a location adjacent said land object and said image changing circuitry causes the player object to interact with said object in a manner defined by the program control code when said predetermined relationship is detected.

2. (Previously Presented) A video game apparatus according to claim 1, wherein said program control code includes an action code to control an action of said player object, said image changing circuitry including animation output circuitry to output animation data to automatically cause said player object to perform an action in accordance with the action code.

3. (Previously Presented) A video game apparatus according to claim 2, wherein when the land object is one of a hollow and a hole and the action code is "jump", said animation data output circuitry outputting animation data to cause the player object to jump over one of said hollow and said hole.

4. (Previously Presented) A video game apparatus according to claim 3, wherein said video apparatus including a player controller including a direction instructing member to instruct a moving direction of said player object so that the player object is moved in the moving direction, said video game apparatus further comprising;

a moving speed detector for detecting a moving speed of the player object, and
jump distance calculating circuitry for calculating a jump distance of the player object based on the moving speed,

said animation data output circuitry outputting animation data to cause the player object to jump according to the jump distance.

5. (Previously Presented) A video game apparatus according to claim 2, wherein when the land object is a wall surface and the action code is "climb", said animation data output circuitry outputs such animation data that the player object climbs said wall surface.

6. (Previously Presented) A video game apparatus according to claim 5, further including wall surface height calculating circuitry, wherein when the action code is not "climb", said wall surface height calculating circuitry is operable to calculate a height of said wall surface,

said animation data output circuitry outputting such animation data that the player object performs an action in accordance with the height of said wall surface.

7. (Previously Presented) A video game apparatus according to claim 1, wherein the program control code includes a camera control code, said image changing circuitry including camera control circuitry to control a virtual camera provided in said three dimensional virtual space.

8. (Previously Presented) A video game apparatus according to claim 7, wherein said virtual camera includes a plurality of virtual cameras, the camera control code including a camera switching code, and said camera control circuitry including camera switching circuitry to switch between said plurality of virtual camera depending upon the camera switching code.

9. (Previously Presented) A video game apparatus according to claim 1, wherein the program control code includes a sound code, further comprising

a sound data generator to generate sound data, and
sound control means to control sound to be outputted from said sound data
generating circuitry depending upon the sound code.

10. (Previously Presented) A video game according to claim 9, wherein sound
data generator can generate sound data for a plurality of ones of sound, the sound code
including a sound switching code and said sound control means including sound
switching circuitry to switch the sound data depending upon the sound switching code.

11. (Currently Amended) A video game apparatus for generating, and supplying
to a display, an image signal to display a player object and a land object existing at the
foot of the player object existing in the vicinity of a land object in a virtual three
dimensional space by processing image data for the player object and land object
according to a program, and further supplying a sound signal to sound output circuitry by
processing sound data according to a program, said video game apparatus comprising:

a player object image data generator that generates player object image data to
display a player object; and

a land object image data generator that generates land object image data to display
a land object; wherein

said land object image data includes a program control code;

a program control code detector to detect a program control code and to detect a
predetermined relationship between the position of the player object and the land object;
and

sound changing circuitry to cause the sound signal to change according to the program control code detected when said predetermined relationship is detected between the position of the player object and the land object, wherein the program control code is not visible to a user of the video game apparatus.

12. (Currently Amended) An information processing system readable memory medium for use in a video game apparatus for generating, and supplying to a display, an image signal to display a player object and a land object existing at the foot of the player object existing in the vicinity of a land object in a virtual three dimensional space by processing image data for the player object and the land object according to a video game program stored in said memory medium, and loaded with a program to be processed by an information processing system included in said video game apparatus, said memory medium comprising:

a player object image data generating program encoded in said memory medium for generating player object image data for displaying a player object during execution of said video game program;

a land object image data generating program encoded in said memory medium for generating land object image data to display a land object during execution of said video game program; wherein

said land object image data includes a program control code;

a program control code detecting program encoded in said memory medium for detecting the program control code and for detecting when there is a predetermined

relationship between the position of the player object and the land object during execution of said video game program, and

an image changing program encoded in said memory medium for causing said image signal to change depending upon the program control code detected when there is said predetermined relationship between the position of the player object and the land object during execution of said video game program, wherein the program control code is not visible to a user of said video game apparatus,

and further wherein the image changing program causes the player object to interact with an object adjacent said land object in a manner defined by the program control code when said predetermined relationship exists.

13. (Previously Presented) A memory medium according to claim 12, wherein the program control code includes an action code to control an action of the player object, the image changing program including an animation data output program for outputting animation data to automatically cause said player object to perform an action depending upon the action code.

14. (Previously Presented) A memory medium according to claim 13, wherein the land object image data generating program generates a land object of a hollow or hole and an action code of "jump", said animation data input program outputting animation data to cause said player object to perform an action of jumping over the hollow or hole.

15. (Previously Presented) A memory medium according to claim 14, wherein said video game apparatus has a controller, in association therewith, including a direction

instructing switch to instruct a moving direction of the player object so that the player object is moved in the moving direction, said memory medium further comprising

a moving speed detecting program to detect a moving speed of the player object,
and

a jump distance calculating program to calculate a jump distance of the player object based on the moving speed, and

said animation data output program outputting animation data to cause the player object to perform an action of jump according to the jump distance.

16. (Previously Presented) A memory medium according to claim 13, wherein the land object image data generating program generates a land object of a wall surface and an action code of "climb", and said animation data output program outputting such animation data that said player object performs an action of climbing said wall surface.

17. (Previously Presented) A memory medium according to claim 16, wherein when the action code is not "climb", a wall surface height calculating program is further comprised to calculate the wall surface height,

the animation data output program outputting such animation data that the player object performs an optimal action depending upon the wall height.

18. (Previously Presented) A memory medium according to claim 12, wherein the land object image data generating program generates land object image data including a camera control code, and the image changing program including a camera control program to control a virtual camera provided in the three dimensional virtual space.

19. (Original) A memory medium according to claim 18, wherein said virtual camera includes a plurality of virtual cameras, the camera control code including a camera switching code, and the camera control program including a camera switching program to switch between said plurality of virtual cameras.

20. (Previously Presented) A memory medium according to claim 12, wherein said land object image data generating program generates a land object including a sound code of a program control code, further comprising

a sound data generating program to generate sound data, and

a sound control program to control sound to be outputted from said sound data generating program depending upon the sound code.

21. (Previously Presented) A memory medium according to claim 20, wherein the sound data generating program generates sound data of a plurality of sounds, the sound code including the sound switching code, and the sound control program including a sound switching program to switch the sound data depending upon the sound switching code.

22. (Currently Amended) For use in a video game apparatus for generating on a display a player object in a virtual three-dimensional space, a method of operating said video game apparatus comprising the steps of:

generating player object image data for display of a player object;

generating land object image data for display of a land object existing at the foot of the player object;

associating a program control code with said land object image data;

detecting if said player object has a predetermined positional relationship with said land object; and

controlling the player object in accordance with the program control code associated with said land object when said player object has a predetermined positional relationship with said land object, wherein the program control code is not visible to a user of the video game apparatus;

and further wherein controlling the player object includes causing the player object to interact with an object adjacent said land object in a manner defined by the program control code when said predetermined relationship exists.

23. (Previously Presented) A method according to claim 22, wherein said program control code includes an action code to control an action of said player object, and further including the step of automatically causing said player object to perform an action in accordance with the action code.

24. (Previously Presented) A method according to claim 23, wherein when the land object is one of a hollow and hole and the action code is "jump", further including the step of causing the player object to jump over one of said hollow and said hole.

25. (Previously Presented) A method according to claim 22, further including the steps of detecting a moving speed of the player object,
calculating a jump distance of the player object based on the moving speed, and
causing the player object to jump according to said jump distance.

26. (Previously Presented) A method according to claim 23, wherein said land object is a wall surface and the action code is "climb", further including the step of controlling the player object to climb said wall surface.

27. (Previously Presented) A method according to claim 26, wherein when the action code is not "climb", further including the steps of calculating a height of said wall surface, and

outputting such animation data that the player object performs an action in accordance with the height of said wall surface.

28. (Previously Presented) A method according to claim 22, wherein the program control code includes a camera control code, and further including the step of controlling a virtual camera provided in said three dimensional virtual space in accordance with said camera control code.

29. (Previously Presented) A method according to claim 28, wherein said camera control code including a camera switching code, and further including the step of switching between a plurality of virtual cameras depending upon the camera switching code.

30. (Previously Presented) A method according to claim 22, wherein the program control code includes a sound code, further including the step of

controlling the sound to be output from a sound data generator depending upon the sound code.

31. (Previously Presented) A method according to claim 30, wherein said sound code including a sound switching code and further including the step of switching the sound data depending upon the sound switching code.

32. (Currently Amended) For use in a video game apparatus for generating on a display a player object in a virtual three-dimensional space, a method of operating said video game apparatus comprising the steps of:

accessing player object image data for generating a player object display;

accessing land object image data for generating a land object display at the foot of the player object;

detecting a program control code associated with said land object image data;

detecting if said player object has a predetermined positional relationship with said land object; and

changing the animation of the player object in the three-dimensional space in accordance with the program control code associated with said land object when said player object has a predetermined positional relationship with said land object, wherein the program control code is not visible to a user of the video game apparatus;

wherein changing the animation includes causing the player object to interact with an object adjacent said land object in a manner defined by said program control code when said predetermined relationship exists.

33. (Previously Presented) A method according to claim 32, wherein said program control code includes an action code to control an action of said player object,

and further including the step of automatically causing said player object to perform an action in accordance with the action code.

34. (Previously Presented) A method according to claim 33, wherein when the land object is one of a hollow and hole and the action code is "jump", further including the step of causing the player object to jump over one of said hollow and said hole.

35. (Previously Presented) A method according to claim 32, further including the steps of detecting a moving speed of the player object,

calculating a jump distance of the player object based on the moving speed, and causing the player object to jump according to the said jump distance.

36. (Previously Presented) A method according to claim 33, wherein said land object is a wall surface and the action code is "climb", further including the step of controlling the player object to climb said wall surface.

37. (Previously Presented) A method according to claim 36, wherein when the action code is not "climb", further including the steps of calculating a height of said wall surface, and

outputting such animation data that the player object performs an action in accordance with the height of said wall surface.

38. (Previously Presented) A method according to claim 32, wherein the program control code includes a camera control code, and further including the step of controlling a virtual camera provided in said three dimensional virtual space in accordance with said camera control code.

39. (Previously Presented) A method according to claim 38, wherein said camera control code including a camera switching code, and further including the step of switching between a plurality of virtual cameras depending upon the camera switching code.

40. (Previously Presented) A method according to claim 32, wherein the program control code includes a sound code, further including the step of

controlling the sound to be output from a sound data generator depending upon the sound code.

41. (Previously Presented) A method according to claim 40, wherein said sound code including a sound switching code and further including the step of switching the sound data depending upon the sound switching code.

42. (Currently Amended) For use in a video game apparatus for generating on a display a player object in a virtual three-dimensional space, a method of operating said video game apparatus comprising the steps of:

accessing player object image data for generating a player object display;

accessing land object image polygon data for generating a land object display at the foot of the player object represented by at least one polygon;

detecting a program control code associated with said at least one polygon of said land object image polygon data;

detecting if said player object has a predetermined positional relationship with said land object; and

controlling the animation of the player object in the three-dimensional space in accordance with the program control code associated with said at least one polygon when said player object has a predetermined positional relationship with said land object, wherein the program control code is not visible to a user of the video game apparatus;
and further wherein controlling the animation includes causing the player object to interact with an object adjacent said land object in a manner defined by said program control code when said predetermined relationship exists.

43. (Previously Presented) A method according to claim 42, further including the step of determining a physical characteristic of said land object, wherein the step of controlling the animation includes the step of controlling the animation of the player object based upon both the program control code and said physical characteristic.

44. (Previously Presented) A method according to claim 42, further including the step of determining the state of said player object, wherein the step of controlling the animation includes the step of controlling the animation of the player object based upon both the program control code and said state of said player object.

45. (Previously Presented) A method according to claim 42, wherein the program control code is indicative of a modified point of view camera perspective and wherein said step of controlling the animation includes the step of depicting the player object from said modified point of view camera perspective.

46. (Previously Presented) A method according to claim 42, wherein said program control code includes an action code to control an action of said player object,

and further including the step of automatically causing said player object to perform an action in accordance with the action code.

47. (Previously Presented) A method according to claim 46, wherein when the land object is one of a hollow and hole and the action code is "jump", further including the step of causing the player object to jump over one of said hollow and said hole.

48. (Previously Presented) A method according to claim 42, further including the steps of detecting a moving speed of the player object,

calculating a jump distance of the player object based on the moving speed, and causing the player object to jump according to the said jump distance.

49. (Previously Presented) A method according to claim 46, wherein said land object is a wall surface and the action code is "climb", further including the step of controlling the player object to climb said wall surface.

50. (Previously Presented) A method according to claim 49, wherein when the action code is not "climb", further including the steps of calculating a height of said wall surface, and

outputting such animation data that the player object performs an action in accordance with the height of said wall surface.

51. (Previously Presented) A method according to claim 42, wherein the program control code includes a camera control code, and further including the step of controlling a virtual camera provided in said three dimensional virtual space in accordance with said camera control code.

52. (Previously Presented) A method according to claim 51, wherein said camera control code including a camera switching code, and further including the step of switching between a plurality of virtual cameras depending upon the camera switching code.

53. (Previously Presented) A method according to claim 42, wherein the program control code includes a sound code, further including the step of

controlling the sound to be output from a sound data generator depending upon the sound code.

54. (Previously Presented) A method according to claim 53, wherein said sound code including a sound switching code and further including the step of switching the sound data depending upon the sound switching code.